"In Your Imagination"

Module 5, Adventure 2

EXPLORE IT

Prompt:

Fantasy stories often draw from conflict in medieval times - castles, knights, and shields. One popular technology during this time was the catapult. A catapult is a big device that launches things. You might have seen some in movies, t.v. shows, or books. You can use simple materials to design a catapult for cotton balls, marshmallows, or small balls of paper or foil. Build your catapult then countdown and launch!

Materials:

- 10 popsicle sticks
- 6 rubber bands
- 1 plastic spoon
- Washable markers
- Something soft to launch
    - Mini-Marshmallows, balls of aluminum foil, cotton balls, or pompoms.
- *Optional: Assorted materials to vary the catapult design (markers, crayons, pipe cleaners, paper cups, more craft sticks, recycled items, etc.)*
- *Optional: Explorer Notebook*

Instructions:

1. Pick a soft material to launch.
2. Think about your item and how you can use the materials to make a catapult that will launch the item.
3. Make a plan and design your catapult. If you want, you can follow this step-by-step video to help you construct your catapult- *FOLLOW THIS LINK* Then you can adapt and change the design.

4. Once you have made your catapult, you can decorate it with washable markers or any method you choose.
5. Before launching, please keep in mind:
    a. Safety first! Pick something soft like a marshmallow, pom pom, or cotton ball to launch.
    b. Do not launch in the direction of anybody in your home - choose a wall or something that can't be harmed by your launch.
6. Get ready and launch! After, think about ways you can improve and change your design. Try to aim for a specific location. Try changing your materials being launched. What do you notice about the changes you make?

Resources:

1. In addition to the video linked above, you can follow this link to find step by step instructions: https://www.instructables.com/id/Craft-Stick-Catapult/
2. Neil's Instructional video: https://youtu.be/dUQV0YmQUEI?t=1

Extensions:

The following are optional steps you can take if you want to extend this adventure:

1. Make design changes and see how it affects the catapult launch.
    a. What happens if you make the popsicle stick stack or your bottom part shorter or taller? ?
    b. Launch different materials (safely) to see how different objects move through the air!
    c. Try different types of spoons or materials to make your launching bucket. How does it change your launch?
2. Go to the "In Your Imagination" topic on Flipgrid and share your creation!

Explorer Notebook

You can use this to help you set up your Explorer Notebook!

Exploring Nature
Module 5, Adventure 2

Materials Used
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Sketch of my creation: